

WHAT IS CLAIMED IS:

1. An information service system linked to a broadcasting system, comprising:

at least one content provider for multicasting at least one content over the Internet to users;

a broadcasting center for broadcasting a program signal which contains an index for identifying the content after the content provider multicasts it; and

facilities of each of the user sides, which comprise:

a monitor device for receiving and displaying the broadcast program signal;

a storage device for storing the content multicast from the content provider;

an extraction device for extracting the index from the broadcast signal;

indication device, in response to the extraction of the index, for indicating that the index corresponding to the content previously stored in the storage device, has been received;

a manipulation device including at least a content presentation button manipulated by the user;

an information presentation device for presenting the content; and

a retrieving device, in response to the manipulation of the content presentation button by the user while the indication device indicates the reception of the index, for retrieving a content corresponding to the index from the storage device to

provide the information presentation device.

2. A system according to Claim 1, wherein

the content provider is further adapted to add a second index to the content, and to multicast the combination of the content and second index over the Internet to the user sides, the second index being associated with the first index;

the storage device at the user is further adapted to store the second index;

the retrieving device at the user side further comprises means for retrieving all of the second indexes in the storage device and transfer them to the information presentation device; and

the manipulation device at the user side further includes a selection means for selecting one of the second indexes on the information presentation device.

3. A system according to Claim 2, wherein

the retrieving device is further adapted, when the user select one of the second indexes using the selection means on the information presentation device, to retrieve the content corresponding to the selected second index and to provide it to the information presentation device.

4. A system according to Claim 3, wherein each of the second indexes contains a URL of the content provider, and thus the content information presentation device presents the URL of the content provider.

5. A system according to Claim 4, wherein

the manipulation device further comprises means for

selecting on of the presented URLs on the information presentation device; and

the facilities at the user side further contain means, upon selecting one of the URLs, for automatically browsing a web page addressed by the selected URL.

6. A system according to Claim 1, wherein at least one of the indication device, manipulation device, information presentation device and retrieving device is incorporated in a user terminal connectable to the Internet.

7. A system according to Claim 1, wherein the monitor device and information presentation device are the same device.

8. An information service system linked to a broadcasting system, comprising:

at least one content provider for multicasting at least one combination of a content and an index over the Internet to users, the content being associated with a program which is broadcast from a broadcasting center, and the index containing at least a time period during which the program is being broadcast; and

facilities of each of the user sides, which comprise:

a monitor device for receiving and presenting the broadcast program signal;

a storage device for storing the content multicast from the content provider;

a manipulation device including at least a content presentation button manipulated by the user;

an information presentation device for presenting

the content; and

a retrieving device, in response to the manipulation of the content presentation button by the user while the indication device indicates the reception of the index, for retrieving a content having an index containing a time period including the current time of the manipulation, from the storage device to provide the information presentation device.

9. A system according to Claim 8, the facilities at the user side further comprises an indication device which, in response to the extraction of the index, indicates that the index corresponding to the content previously stored in the storage device, has been received.

10. A system according to Claim 8, wherein at least one of the indication device, manipulation device, information presentation device and retrieving device is incorporated in a user terminal connectable to the Internet.

11. A system according to Claim 8, wherein the monitor device and information presentation device are the same device.

12. An information service system linked to a broadcasting system, comprising:

a broadcasting center for broadcasting a program signal in which a combination of a content and an index containing a time period during which the content is available to a user, is multiplexed;

at least one content provider for providing at least

one content to the broadcasting center, thereby the content together with the index is multiplexed in the program signal; and

facilities of each of user sides, which comprise:

a monitor device for receiving and displaying the broadcast program signal;

an extraction device for extracting the content and index from the broadcast signal;

a storage device for storing the extracted content and index;

an indication device, in response to the extraction of the content and index, for indicating during the time period contained in the index that the content has been available from the storage device;

a manipulation device including at least a content presentation button manipulated by the user;

an information presentation device for presenting the content; and

a retrieving device, in response to the manipulation of the content presentation button by the user while the indication device indicates the availability of the content, for retrieving the content from the storage device to provide the information presentation device.

13. A system according to Claim 12, wherein the monitor device and information presentation device are the same device.

14. A system according to Claim 12, wherein at least one of the indication device, manipulation device, information presentation device and retrieving device is incorporated in a user terminal connectable to the Internet.

15. An information service system linked to a broadcasting system, comprising:

a broadcasting center for broadcasting program signals in which indexes containing the same URL are multiplexed; and

at least one content provider for providing one of contents on a web page addressed by the URL of the index, the web page contents respectively corresponding to the program contents, the content provider having a table representing a relationship between the web page contents and the indexes,

the content provider updating the content on the web page when it detects that the broadcasting program and thus index are updated, with reference to the relation table.

16. A system according to Claim 15, further comprising facilities of each of user sides, which comprise:

a monitor device for receiving and displaying the broadcast program signal;

an extraction device for extracting the index from the broadcast signal;

a storage device for storing the extracted and index;

an indication device, in response to the extraction of the index, for indicating that the URL has been available from the storage device;

a manipulation device including a URL presentation button manipulated by the user;

an information presentation device for presenting the content;

a retrieving device, in response to the manipulation of the URL presentation button by the user while the indication device indicates the availability of the content, for retrieving the URL in the index from the storage device; and

means for automatically browsing the content currently presented on the web page of the content provider, on the information presentation device, upon retrieving the URL by the retrieving device.

17. A system according to Claim 16, wherein the monitor device and information presentation device are the same device.

18. A system according to Claim 16, wherein at least one of the indication device, manipulation device, information presentation device and retrieving device is incorporated in a user terminal connectable to the Internet.

19. A system according to Claim 16,

the content provider is further adapted to multicast the same contents as those to be presented on the web page before broadcasting the corresponding to the program contents to the users where the web page contents are stored in the storage device;

the extraction device is further adapted to extract the web page content from the broadcast signal;

the storage device is further adapted to store the web page content;

the indication device is further adapted, in response to the extraction of the content, to indicate that the web page content has been available from the storage device;

the manipulation device further comprises a content presentation button; and

the retrieving device is further adapted, in response to the manipulation of the content presentation button by the user while the indication device indicates the availability of the content, to retrieving the content from the storage device to provide the information presentation device.